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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,672	01/22/2002	Michael Fonseca	501032.20502 (24301.11)	5258

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EXAMINER

SCHAETZLE, KENNEDY

ART UNIT PAPER NUMBER

3762

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,672

Applicant(s)

FONSECA ET AL.

Examiner

Kennedy Schaetzle

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 29-31 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 15, 16, 22, 23, 25-27, 32 and 33 is/are rejected.
- 7) ☒ Claim(s) 10, 12-14, 17-21, 24 and 28 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 406 (Fig. 15). A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

2. The disclosure is objected to because of the following informalities: the description of Fig. 15 does not appear to match what is shown in the figure (e.g., the LCD screen is described as element 404, yet it appears in the drawing that said number refers to the body of the patient). The determination of what is correct is difficult due to the fact that there is no contrast between the black pointer arrows and the black background of the figure itself. Also, reference number 275 on line 18 of page 15 is not found in the drawings.

Appropriate correction is required.

Claim Objections

3. Claim 32 is objected to because of the following informalities: the word "a" on line 2 should be replaced by the phrase "that is" for grammatical purposes. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 7-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in claims 7 and 8 if the metallic members referred to are meant to pertain to the capacitor/inductor of claim 1, or if the applicant is reciting metallic

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members in addition to the metal spiral making up the capacitor/inductor. If the former is true, then the applicant should make it clear that the capacitor and inductor further comprise such members. The examiner will assume the metallic members being set forth relate to the metallic spiral forming the LC circuit in any rejection on the merits.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5, 7, 8, 11, 15, 16, 22, 23, 25-27, 32 and 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Gershenfeld et al. (Pat. No. 6,025,725).

Regarding claims 1, 32 and 33, Gershenfeld et al. disclose a sensor comprising a self-contained resonant circuit comprising a capacitor and an inductor to form an LC resonator, wherein the circuit is variable in response to the physical property of a patient (note in particular col. 2, lines 6-18 and lines 48-59 as well as col. 3, lines 25-31). The intended use of determining a physical property in a patient's heart chamber was considered, but deemed insufficient to saliently distinguish over the sensor of Gershenfeld et al., which, if placed in a heart chamber, would be capable of sensing a physical property of said chamber.

Concerning the recitation regarding the sensor's flexibility, the examiner considers the sensor of Gershenfeld et al. to be sufficiently flexible to be folded for delivery percutaneously. The applicants are not claiming the sensor to be folded, but simply that the sensor be sufficiently flexible *to be* folded. Gershenfeld et al. teach that it is desirable to manufacture relatively thin flexible sensors (note col. 1, lines 49-66, and in particular col. 8, lines 11-14). They further refer to suitable dielectric materials for use in the construction of the invention, including among the list polyvinylidene difluoride (PVDF) in sheet form (col. 2, lines 18-31). The polymer PVDF in sheet form is known by those of ordinary skill in the material sciences to be flexible and easily shapeable.

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Gershendfeld et al. additionally show the substrate of the sensor to be folded onto itself (see Fig. 4) lending further credence to its flexibility.

Regarding claims 11, 16 and 27, the applicants are not claiming the sensor to comprise a folded shape of the type set forth, but simply that the sensor shape can be folded in such a manner. By analogy, a rectangular sheet of paper is capable of being folded into a wide variety of shapes, but the fact that something can be folded into said shapes does not necessarily mean that it is.

Concerning claim 15, note col. 7, lines 10-13. The functional language "...to facilitate folding..." was considered by the examiner to constitute merely a recitation of desired result.

Regarding claim 23, the examiner directs the applicants' attention to col. 7, lines 22-26.

In regards to claim 25, note col. 8, lines 14-17.

Concerning claim 26, the examiner considers the stacked construction shown in Fig. 6 to constitute a capacitance distributed across an array of smaller capacitances.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gershenfeld et al. (Pat. No. 6,025,725).

Although Gershenfeld et al. do not disclose the use of a sensor with a disk shape, it is taught that the resonator can be "...constructed in a variety of configurations, depending on the application, the desired output signal strength, the location of the resonant frequency, etc...." (col. 5, lines 37-40). To employ a disk shape as opposed to a rectangular shape would have therefore been considered a matter of obvious design by those of ordinary skill in the art.

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Allowable Subject Matter

10. Claim 9 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

11. Claims 10, 12-14, 17-21, 24 and 28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Regarding claim 10, there is no teaching in the prior art of record for incorporating a daisy or flower shape as defined in the specification into the sensor of Gershenfeld et al.. Applicants state that such a shape allows for easier insertion into a catheter for implant into the body.

12. Claims 29-31 are allowed.

There is no teaching in the prior art of record for a sensor delivery system comprising the sensor of claim 1 folded within the distal end of an outer catheter.

Conclusion


13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kennedy Schaetzle whose telephone number is (703) 308-2211. The examiner can normally be reached on M-F from 9:30 - 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 308-0758 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.

KJS
March 23, 2003


KENNEDY SCHAETZLE
PRIMARY EXAMINER